

AMENDMENT UNDER 37 C.F.R. § 1.111
Appln. No. 09/736,297
Docket No. Q62305

REMARKS

Claims 1-16 are all the claims pending in the application. Claims 1 and 10 are independent claims. New dependent claims 11-16 have been added.

As an initial matter, the Examiner has not forwarded to Applicants' representative an initialed copy of the PTO/SB/08 A & B form submitted with the Information Disclosure Statement filed on March 15, 2001. Therefore, Applicants re-submit herewith a copy of the Information Disclosure Statement filed on March 15, 2004, along with a copy of the PTO/SB/08 A & B form, cited references, and date stamped filing receipt. Applicants respectfully request the Examiner to consider the cited references and forward a initialed copy of the PTO/SB/08 A & B form with the next correspondence.

Claim Objections

The Examiner has objected to claims 1 and 10, indicating that the phrase "is high is higher than" is a typographical error. Applicants respectfully submit that this phrase is not a typographical error. Instead, the second part of this phrase, "is higher than", actually modifies the recitation "a light intensity in a specific wavelength band".

However, in order to broaden the scope of subject matter claimed, Applicants have deleted this feature from independent claims 1 and 10 and have added new dependent claim directed to this feature. New dependent claims 11, 13, 14, and 16 now recite that a light intensity of the light in the specific wavelength band is higher than a light intensity in an unspecific wavelength band.

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Since the scope of claimed subject matter is broadened, there is no estoppel by this amendment that would effect the scope of equivalents. In view of the remarks above and amendments to claims 1 and 10, Applicants respectfully request the Examiner to withdraw the objection.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-9 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Nakashima et al. (US 4,926,253) in view of Ide et al. (US 5,841,899) and Matsuda et al. (US 5,705,806). Claim 10 is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Nakashima in view of Ide.

Independent claims 1 and 10 have been amended to recite that the image scanner includes a means for selecting a specific wavelength band, said specific wavelength band being coextensive with or within a wavelength band of a portion to be dropped out, whereby the reflectivity at said wavelength band of the portion to be dropped out is high. This amendment is supported by the original specification at least by the *non-limiting* embodiment discussed at page 7, line 1 to page 8, line 17 and shown in Figs. 3A and 3B. For example, when the high reflectivity wavelength band of the area to be dropped out is from 650 to 750 nm, the light of the exclusive light source is selected to have a high intensity within the band of 650 to 750 nm.

With respect to independent claim 1, Applicants respectfully request that the Examiner withdraw the rejection at least because the combination of Nakashima, Ide, and Matsuda does not teach or suggest the claimed invention. For example, the combination of Nakashima, Ide,

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and Matsuda does not teach or suggest the claimed scanner having a means for selecting a specific wavelength band, said specific wavelength band being coextensive with or within a wavelength band of a portion of the original to be dropped out, whereby the reflectivity at said wavelength band of the portion to be dropped out is high. By selecting a specific wavelength band being coextensive with or within a wavelength band of a portion of the original to be dropped out, the intensity of the reflected light of the portion to be dropped out can be more like the light intensity reflected by a blank (white) portion on the original.

Nakashima, discloses a specific color field recognition apparatus in which a document, which includes black and red image data, is illuminated first by a fluorescent lamp 1 (green light) and then by the fluorescent lamp 1 and an LED light array 2 (red light). When the fluorescent lamp 1 is lit, a reference shading waveform SHO is generated, and the black image data is read. *See* Nakashima at 6:28-32 and Fig. 3. Then, when the fluorescent lamp 1 and LED array 2 are lit, another reference shading waveform SHI is generated, and the red image data is read. *See* Nakashima at 6:33-32-35.

As shown in Nakashima's Figs. 4A & 4B, when the green fluorescent lamp 1 is lit, red, blue, and black data are considered as colored because their reflected intensity is below the threshold value V_{TH} . Moreover, when the fluorescent lamp 1 and LED array 2 are lit, only the blue and black data are considered as colored because their reflected intensity is below the threshold value V_{TH} . Therefore, the specific color field recognition apparatus can recognize both red and black image data.

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According to the rejection, it appears to be the Examiner's position that the combined light of Nakashima's fluorescent lamp 1 and LED array 2 corresponds to the recited "light source portion" and that the red light of the LED array corresponds to the specific wavelength band. However, even if the red light has a higher intensity than other light regions of the combined light, there is no teaching or suggestion of the claimed image scanner having a means for selecting a specific wavelength band. Instead, Nakashima merely discloses that the red light is always used, regardless of the wavelength band of a portion of the original to be dropped out.

Moreover, the green light of Nakashima fluorescent lamp 1 also cannot be considered the "specific wavelength band" because, like Nakashima's red LED light, the green fluorescent light is always used, regardless of the wavelength band of a portion of the original to be dropped out.

These deficiencies are consistent with the overall teachings of Nakashima. That is, Nakashima's specific color field recognition apparatus is designed to read both black and red image data by illuminating the document with the green light, and then green and red light.

In addition, Ide does not make up for this deficiency in Nakashima. Ide merely discloses a method for picking up a drop out image in which a light (which can be red, blue or green) is used to illuminate the image. *See* Ide at 5:21-31. However, Ide does not teach or suggest that the a specific wavelength of the illuminated light is selected based on a wavelength band of a portion of an original to be dropped out.

Finally, Matsuda, which the Examiner relies on in an attempt to show a stand type image scanner, does not make up for the deficiencies in Nakashima and Ide discussed above.

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Therefore, Applicants respectfully requests that the Examiner withdraw the rejection of independent claim 1 at least because the combination of Nakashima, Ide, and Matsuda does not teach or suggest all of the claim recitations. In addition, Applicants respectfully request that the Examiner withdraw the rejection of dependent claims 2-9 at least because of their dependency from claim 1.

In addition, with respect to independent claim 10, Applicants respectfully request that the Examiner withdraw the rejection at least because the combination of Nakashima and Ide does not teach or suggest the claimed invention. For example, the combination of Nakashima and Ide, does not teach or suggest the method including selecting said specific wavelength band, wherein said specific wavelength band is coextensive with or within a wavelength band of a portion of the original to be dropped out, whereby the reflectivity at said wavelength band of the portion to be dropped out is high, as is discussed above with respect to independent claim 1.

New Claims


Finally, new dependent claims 11-16 have been added in order to provide additional claim coverage. No new matter has been added. Applicants respectfully request the Examiner to allow these claims at least because of their dependency from one of independent claims 1 and 10.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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